# Meena Bisht

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## ACADEMIC AND RESEARCH CAREER

Degree	Subjects	Institute	Year	Division
Ph. D.	Chemistry	University of Delhi, Delhi	2017	First
M. Sc.	Chemistry	University of Delhi, Delhi	2012	First
B. Sc.(H)	Chemistry, Physics & Maths	University of Delhi, Delhi	2010	First
12 <sup>th</sup>	Physics, Chemistry, Maths, English & Biology	Central Board of Secondary Education (C.B.S.E)	2007	First
10 <sup>th</sup>	English, Hindi, Maths, Social studies & Science	Central Board of Secondary Education (C.B.S.E)	2005	First

### **Ph.D. INFORMATION:**

Thesis title: "Understanding the behavior of proteins in the presence of ionic liquids".

**Ph. D. Supervisor: Prof. P. Venkatesu**, Department of Chemistry, University of Delhi, New Delhi-110007 India.

Date of Award of Ph.D. Degree: 18-11-2017.

### MAJOR RESEARCH PROJECTS

1) Project title: Nanoemulsion hydrogel platform for thermodynamic stability and enhanced

bioavailability of curcumin from Curcuma longa for topical administration, Funded by SERB, India (PDF/2019/001024).

2) **Project title:** Multipurpose strategies for the recovery of a wide range of agroforestry and fisheries

by-products: A step in the creation of an integrated biorefinery, POCI-01-145-FEDER- 016403 - SAICTPAC/0040/2015, BPD funded under the project PAC. **Supervisor: Professor J.A.P Coutinho** 

3) **Project title:** Understanding of activity and stability of proteins in nontoxic ionic liquids, Year: 2016-2017

Funded by the Department of Biotechnology (DBT), India (BT/PR5287/BRB/10/1068/2012). **Supervisor: Professor Pannuru Venkatesu** 

#### **RESEARCH VISITS**

- Post -doctoral Researcher at Polish Academy of Sciences, Institute of Plant Genetics, Poland (Current)
- Visiting Researcher at Department of Chemistry, CICECO-Aveiro Institute of Materials, University of Aveiro, Portugal, from 04 May 2022 to 20 August 2022.
- Post -doctoral Researcher at Department of Chemistry, Indian Institute of Technology Delhifrom January 2020 to July 2022.
- Post -doctoral research fellow at Department of Chemistry, CICECO-Aveiro Institute of Materials, University of Aveiro, Portugal from January 2018 to December 2019.
- Visiting Researcher at Centre for Nano and Material Sciences, JAIN (Deemed to be University), Jain Global Campus, Kanakapura road, Bangalore 562112, India.
- **Research** Associate at Department of Chemistry, University of Delhi, Delhi.

### PUBLICATION (5 MAJOR PUBLICATIONS, LAST 5 YEARS)

- Meena Bisht,\* Margarida Martins, Ana C. R. V. Dias, Sónia P. M. Ventura\* and João A. P. Coutinho, Uncovering the potential of aqueous solutions of deep eutectic solvents on the extraction and purification of collagen type I from Atlantic codfish (Gadus morhua), *Green Chem.*,2021, 23, 8940-8948.
- [2] <u>Meena Bisht</u>, Marcia C. Neves, Joana L. Pereira, Siddharth Pandey, Robin D Roger, Joao A.P.Coutinho, Sonia P.M. Ventura, Enhanced dissolution and extraction of chitin from crawfish using acidic deep eutectic solvent, *ACS Sustainable Chem. Eng*, 2021, 9, 16073-16081.
- [3] <u>Meena Bisht</u>, Dibyendu Mondal, Matheus M. Pereira, Mara G. Freire, Pannuru Venkatesu, and J.A. P. Coutinho, Long-term protein packaging in cholinium-based ionic liquids: improved catalytic activity and enhanced stability of cytochrome c against multiple stresses, *Green Chem.*, 2017, 19, 4900-4911.
- [4] <u>Meena Bisht</u>, Awanish Kumar and Pannuru Venkatesu. Refolding effects of partially immiscible ammonium-based ionic liquids on the urea-induced unfolded lysozyme structure, *Phys. Chem. Chem. Phys.*, 2016, 18, 12419-12422.
- [5] Pankaj Bharmoria,<sup>‡</sup> Meena Bisht,<sup>‡</sup> Maria C Gomes,<sup>‡</sup> Margarida Martins, Márcia C Neves, João F Mano, Igor Bdikin, João AP Coutinho, Sónia PM Ventura, Protein-olive oil-in-water nanoemulsions as encapsulation materials for curcumin acting as anticancer agent towards MDA- MB-231 cells, *Scientific Reports*, 2021, 11, 9099 (<sup>‡</sup>Contributed equally).